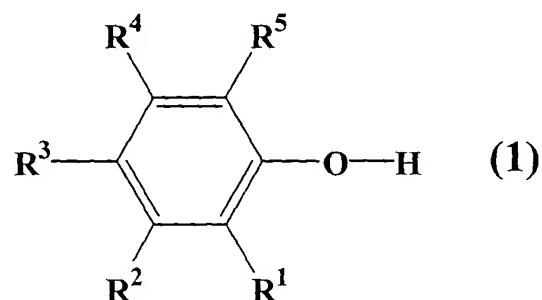


WHAT IS CLAIMED IS:

1. An organohydrosiloxane composition comprising:
 - 5 a. one or more organohydrosiloxane compounds, each having at least one [-HSiR-O-] unit, wherein R = C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; and
 - b. an antioxidant compound of Formula (1),

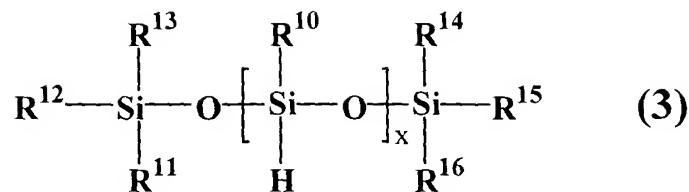
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wherein the antioxidant compound is a phenolic compound and is present in an amount between about 1 ppm to about 5000 ppm, and

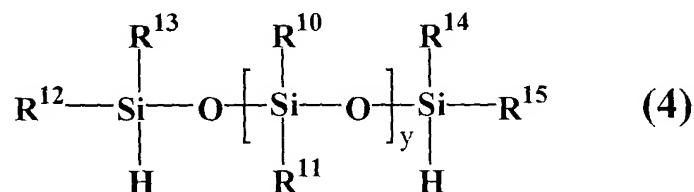
15 wherein R¹ through R⁵ are each independently H, OH, C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy or substituted or unsubstituted aryl.

2. The composition of claim 1, wherein said one or more organohydrosiloxane compounds are one or more linear compounds, one or more cyclic compounds, and any combinations thereof.
- 20
3. The composition of claim 2, wherein said one or more linear compounds have a formula according to Formula (3),



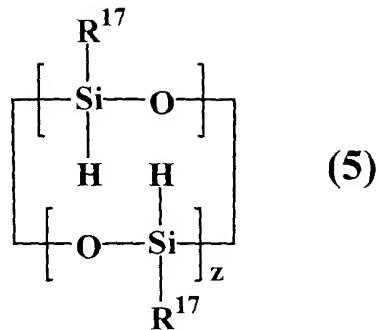
- 5 wherein R¹⁰ is C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; R¹¹ through R¹⁶ are each independently H, C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; x is about 1 to about 20; and x can equal 0
 10 when at least one of R¹¹ through R¹⁶ is H.
- 15 4. The composition of claim 3, wherein R¹⁰ is methyl, ethyl, propyl, butyl, or cyclohexyl; R¹¹ through R¹⁶ is methyl, ethyl, propyl, butyl, cyclohexyl or H; and x is about 1 to about 10.
- 20 5. The composition of claim 3, wherein said linear organohydrosiloxanes of Formula (3) are selected from the group consisting of: 1,1,1,3,3-pentamethyldisiloxane, 1,1,1,3,3-pentaethylsiloxane, 1,1,1,3,3-pentaphenyldisiloxane, 1,1,1,3,3-penta(4-methylphenyl)disiloxane, 1,1,5,5-tetramethyl-3-ethyltrisiloxane, 1,1,5,5-tetraethyl-3-methyltrisiloxane, 1,1,3,5,5-pentamethyltrisiloxane, 1,1,3,5,5-pentaethyltrisiloxane, 1,1,3,5,5-pentaphenyltrisiloxane, 1,1,3,5,5-penta(4-methylphenyl)trisiloxane, 1,1,1,5,5-heptamethyl-3-ethyltrisiloxane, 1,1,1,5,5-heptaethyl-3-methyltrisiloxane, 1,1,1,3,5,5-heptamethyltrisiloxane, 1,1,1,3,5,5-heptaethyltrisiloxane, 1,1,1,3,5,5-heptaphenyltrisiloxane, 1,1,1,3,5,5-hepta(4-methylphenyl)trisiloxane, 1,1,3,5,7,7-hexamethyltetrasiloxane, 1,1,3,5,7,7-hexaethyltetrasiloxane, 1,1,3,5,7,7-hexaphenyltetrasiloxane, 1,1,3,5,7,7-hexa(4-methylphenyl)tetrasiloxane, 1,1,1,3,5,7,7,7-octamethyltetrasiloxane,
- 25 30

- 1,1,1,3,5,7,7,7-octaethyltetrasiloxane, 1,1,1,3,5,7,7,7-octaphenyltetrasiloxane, 1,1,1,3,5,7,7,7-oct(4-methylphenyl)tetrasiloxane, 1,1,3,5,7,9,9-heptamethylpentasiloxane, 1,1,3,5,7,9,9-heptamethylpentasiloxane, 1,1,3,5,7,9,9-heptaethylpentasiloxane, 1,1,3,5,7,9,9-heptaphenylpentasiloxane, 1,1,3,5,7,9,9-hepta(4-methylphenyl)pentasiloxane, 1,1,1,3,5,7,9,9,9-nonamethylpentasiloxane, 1,1,1,3,5,7,9,9,9-nonaethylpentasiloxane, 1,1,1,3,5,7,9,9,9-naphenylpentasiloxane, 1,1,1,3,5,7,9,9,9-nona(4-methylphenyl)pentasiloxane, 1,1,3,5,7,9,11,11-octaamethylhexasiloxane, 1,1,3,5,7,9,11,11-octaethylhexasiloxane, 1,1,3,5,7,9,11,11-octaphenylhexasiloxane, 1,1,3,5,7,9,11,11-oct(4-methylphenyl)hexasiloxane, 1,1,1,3,5,7,9,11,11,11-decamethylhexasiloxane, 1,1,1,3,5,7,9,11,11,11-decaethylhexasiloxane, 1,1,1,3,5,7,9,11,11,11-decaphenylhexasiloxane, 1,1,1,3,5,7,9,11,11,11-deca(4-methylphenyl)hexasiloxane, and any combinations thereof.
6. The composition of claim 2, wherein said one or more linear compounds have a formula according to Formula (4),



wherein R¹⁰ is C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; R¹¹ through R¹⁶ are each independently H, C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; and y is about 0 to about 20.

7. The composition of claim 6, wherein R¹⁰ is methyl, ethyl, propyl, butyl, or cyclohexyl; R¹¹ through R¹⁶ is methyl, ethyl, propyl, butyl, cyclohexyl or H; and y is about 0 to about 8.
- 5 8. The composition of claim 6, wherein said linear organohydrosiloxanes of Formula (4) are selected from the group consisting of: 1,1-diethyl-3,3-dimethyldisiloxane, 1,1,3,3-tetramethyldisiloxane, 1,1,3,3-tetraethyltrisiloxane, 1,1,3,3-tetraphenyldisiloxane, 1,1,3,3-tetra(4-methylphenyl)disiloxane,
10 1,1,5,5-tetramethyl-3,3-diethyltrisiloxane, 1,1,5,5-tetraethyl-3,3-dimethyltrisiloxane, 1,1,3,3,5,5-hexamethyltrisiloxane, 1,1,3,3,5,5-hexaethyltrisiloxane, 1,1,3,3,5,5-hexa(4-methylphenyl)trisiloxane, 1,1,3,3,5,5,7,7-octamethyltetrasiloxane, 1,1,3,5,7,7-octaethyltetrasiloxane,
15 1,1,3,3,5,5,7,7-octaphenyltetrasiloxane, 1,1,3,3,5,5,7,7-octa(4-methylphenyl)tetrasiloxane, 1,1,3,3,5,5,7,7,9,9-decamethylpentasiloxane, 1,1,3,3,5,5,7,7,9,9-decaethylpentasiloxane, 1,1,3,3,5,5,7,7,9,9-decaphenylpentasiloxane, 1,1,3,3,5,5,7,7,9,9-deca(4-methylphenyl)pentasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11-dodecaamethylhexasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11-dodecaethylhexasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11-dodecaphenylhexasiloxane, and 1,1,3,3,5,5,7,7,9,9,11,11-dodeca(4-methylphenyl)hexasiloxane, and any combinations thereof.
20
25 9. The composition of claim 2, wherein said one or more cyclic compounds have a formula according to Formula (5),



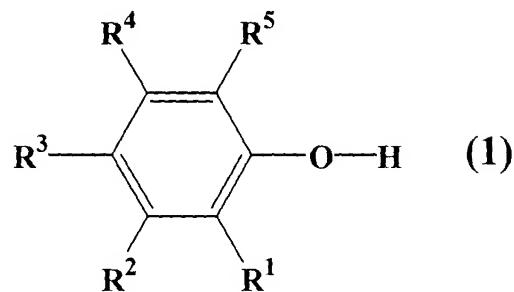
wherein R¹⁷ is independently C₁-C₁₈ linear, branched, or cyclic alkyl,
 5 C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or
 unsubstituted aryl; and z is about 2 to about 21.

10. The composition of claim 9, wherein R¹⁷ is methyl, ethyl, propyl, butyl, or cyclohexyl; and z is about 2 to about 11.
11. The composition of claim 9, wherein said cyclic organohydrosiloxanes of Formula (5) are selected from the group consisting of: 1,3,5-trimethylcyclotrisiloxane, 1,3,5-triethylcyclotrisiloxane, 1,3,5-triphenylcyclotrisiloxane, 1,3,5-tri(4-methylphenyl)cyclotrisiloxane, 1,3,5,7-tetramethylcyclotetrasiloxane, 1,3,5,7-tetraethylcyclotetrasiloxane, 1,3,5,7-tetraphenylcyclotetrasiloxane, 1,3,5,7-tetra(4-methylphenyl)cyclotetrasiloxane, 1,5-dimethyl-3,7-diethylcyclotetrasiloxane, 1,3-dimethyl-5,7-diethylcyclotetrasiloxane, 20 1,3,5,7,9-pentamethylcyclopentasiloxane, 1,3,5,7,9-pentaethylcyclopentasiloxane, 1,3,5,7,9-pentaphenylcyclopentasiloxane, 1,3,5,7,9-penta(4-methylphenyl)cyclopentasiloxane, 1,3,5,7,9,11-hexamethylcyclohexasiloxane, 1,3,5,7,9,11-hexaethylcyclohexasiloxane, 1,3,5,7,9,11-hexaphenylcyclohexasiloxane, 1,3,5,7,9,11-hexa(4-methylphenyl)cyclohexasiloxane, 1,5,9-trimethyl-3,7,11-

triethylcyclohexasiloxane, 1,3,5-trimethyl-7,9,11-triethylcyclohexasiloxane, and any combinations thereof.

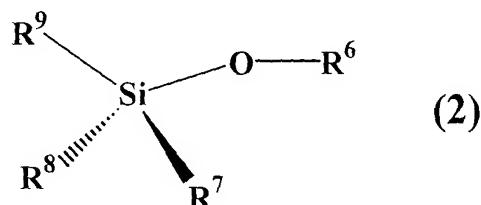
12. The composition of claim 1, wherein R¹ through R⁵ are H, OH, methyl, ethyl, methoxy, ethoxy, and tert-butyl.
5
13. The composition of claim 1, wherein said antioxidant compound of Formula (1) is selected from the group consisting of: phenol, hydroquinone, 4-methylphenol, 3-methylphenol, 2-methylphenol, 4-ethylphenol, 4-propylphenol, 4-iso-propylphenol, 4-butylphenol, 4-sec-butylphenol, 4-iso-butylphenol, 4-tert-butylphenol, 4-methoxyphenol, 3-methoxyphenol, 2-methoxyphenol, 4-ethoxyphenol, 4-propoxyphenol, 4-butoxyphenol, 2,4-di-tert-butylphenol, 2-(1-methylbutyl)phenol, 2-(benzyloxy)phenol, 2-tert-butyl-6-methylphenol, 3,4,5-trimethoxyphenol, 3-ethoxy-4-methylphenol, 4-benzyloxyphenol, 4-benzyl-2,6-di-tert-butylphenol, 2-(2-butenyl)phenol, 2-(4-methylbenzyl)phenol, 2,6-di-tert-butyl-4-methylphenol (BHT), 1,2-dihydroxybenzene, 2,4,6-tris-benzyloxyphenol, 2,4-dicyclohexyl-5-methylphenol, 6-tert-butyl-1,2-dihydroxybenzene, and any combinations thereof.
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15
20
14. The composition of claim 1, wherein said antioxidant compound is present in an amount between about 1 ppm to about 1000 ppm.
- 25 15. The composition of claim 1, wherein said antioxidant compound is present in an amount between about 25 ppm to about 200 ppm.
16. An organohydrosiloxane composition comprising:
30
a. one or more organohydrosiloxane compounds, each having at least one [-HSiR-O-] unit, wherein R = C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl;

- b. an antioxidant compound of Formula (1),



5 wherein the antioxidant compound is a phenolic compound
and is present in an amount between about 1 ppm to about
5000 ppm, and wherein R¹ through R⁵ are each
independently H, OH, C₁-C₁₈ linear, branched, or cyclic alkyl,
C₁-C₁₈ linear, branched, or cyclic alkoxy or substituted or
10 unsubstituted aryl; and

- c. an alkoxy silane of Formula (2),



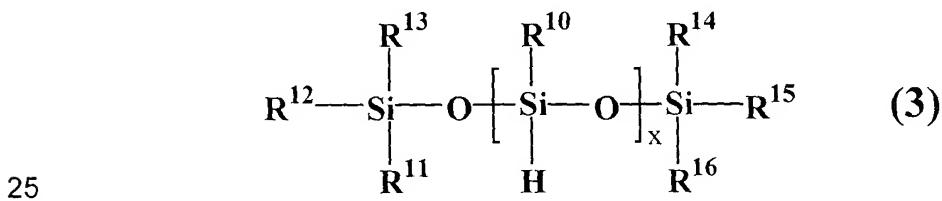
15 wherein said alkoxy silane is present in an amount between
about 1 ppm and about 5000 ppm; and wherein R⁶ is a C₁-C₁₈
linear, branched, or cyclic alkyl or substituted or unsubstituted
aryl; and R⁷, R⁸, and R⁹ are independently H, C₁-C₁₈ linear,
20 branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic
alkoxy or substituted or unsubstituted aryl.

17. The composition of claim 16, wherein R¹ through R⁵ are H, OH,
25 methyl, ethyl, methoxy, ethoxy, or tert-butyl.

17. The composition of claim 16, wherein R¹ through R⁵ are H, OH, methyl, ethyl, methoxy, ethoxy, or tert-butyl.
18. The composition of claim 16, wherein said antioxidant compound of
5 Formula (1) is selected from the group consisting of: phenol, hydroquinone, 4-methylphenol, 3-methylphenol, 2-methylphenol, 4-ethylphenol, 4-propylphenol, 4-iso-propylphenol, 4-butylphenol, 4-sec-butylphenol, 4-iso-butylphenol, 4-tert-butylphenol, 4-methoxyphenol, 3-methoxyphenol, 2-methoxyphenol, 4-ethoxyphenol, 4-propoxyphenol, 4-butoxyphenol, 2,4-di-tert-butylphenol, 2-(1-methylbutyl)phenol, 2-(benzyloxy)phenol, 2-tert-butyl-6-methylphenol, 3,4,5-trimethoxyphenol, 3-ethoxy-4-methylphenol, 4-benzyloxyphenol, 4-benzyl-2,6-di-tert-butylphenol, 2-(2-butenyl)phenol, 2-(4-methylbenzyl)phenol, 2,6-di-tert-butyl-4-methylphenol (BHT), 1,2-dihydroxybenzene, 2,4,6-tris-benzyloxyphenol, 2,4-dicyclohexyl-5-methylphenol, 6-tert-butyl-1,2-dihydroxybenzene, and any combinations thereof.
10
15
19. The composition of claim 16, wherein said antioxidant compound is
20 present in an amount between about 1 ppm to about 1000 ppm.
20. The composition of claim 16, wherein said antioxidant compound is
present in an amount between about 25 ppm to about 200 ppm.
- 25 21. The composition of claim 16, wherein R⁶ is methyl, ethyl, or propyl; and R⁷, R⁸ and R⁹ are methyl, ethyl, propyl, methoxy, ethoxy or propoxy.
22. The composition of claim 16, wherein said alkoxy silane of Formula
30 (2) is selected from the group consisting of: trimethylmethoxysilane, triethylmethoxysilane, tripropylmethoxysilane, triphenylmethoxysilane, tri(4-methylphenyl)methoxysilane, dimethyldimethoxysilane, diethyldimethoxysilane,

dipropyldimethoxysilane, diphenyldimethoxysilane, di(4-methylphenyl)dimethoxysilane, methyltrimethoxysilane, ethyltrimethoxysilane, propyltrimethoxysilane, phenyltrimethoxysilane, 4-methylphenyltrimethoxysilane,
5 trimethylethoxysilane, triethylethoxysilane, tripropylethoxysilane, triphenylethoxysilane, tri(4-methylphenyl)ethoxysilane, dimethyldiethoxysilane, diethyldiethoxysilane, dipropyldiethoxysilane, diphenyldiethoxysilane, di(4-methylphenyl)diethoxysilane, methyltriethoxysilane,
10 ethyltriethoxysilane, propyltriethoxysilane, phenyltriethoxysilane, 4-methylphenyltriethoxysilane, trimethylpropoxysilane, triethylpropoxysilane, tripropylpropoxysilane, triphenylpropoxysilane, tri(4-methylphenyl)propoxysilane, dimethyldipropoxysilane, diethyldipropoxysilane, dipropyldipropoxysilane,
15 diphenyldipropoxysilane, di(4-methylphenyl)dipropoxysilane, methyltripropoxysilane, ethyltripropoxysilane, propyltripropoxysilane, phenyltripropoxysilane, 4-methylphenyltripropoxysilane, trimethylbutoxysilane, triethylbutoxysilane, tripropylbutoxysilane, triphenylbutoxysilane, tri(4-methylphenyl)butoxysilane,
20 dimethyldibutoxysilane, diethyldibutoxysilane, dipropyldibutoxysilane, diphenyldibutoxysilane, di(4-methylphenyl)dibutoxysilane, methyltributoxysilane, ethyltributoxysilane, propyltributoxysilane, phenyltributoxysilane, 4-methylphenyltributoxysilane, trimethylphenoxy silane,
25 triethylphenoxy silane, tripropylphenoxy silane, triphenylphenoxy silane, tri(4-methylphenyl)phenoxy silane, dimethyldiphenoxysilane, diethyldiphenoxysilane, dipropyldiphenoxysilane, diphenyldiphenoxysilane, di(4-methylphenyl)diphenoxysilane, methyltriphenoxysilane,
30 ethyltriphenoxysilane, propyltriphenoxysilane, phenyltriphenoxysilane, 4-methylphenyltriphenoxysilane, trimethyl(4-methylphenoxy)silane, triethyl(4-methylphenoxy)silane, tripropyl(4-methylphenoxy)silane, triphenyl(4-methylphenoxy)silane, tri(4-

- methylphenyl)(4-methylphenoxy)silane, dimethyldi(4-methylphenoxy)silane, diethyldi(4-methylphenoxy)silane, dipropyldi(4-methylphenoxy)silane, diphenyldi(4-methylphenoxy)silane, di(4-methylphenyl)di(4-methylphenoxy)silane, methyltri(4-methylphenoxy)silane, ethyltri(4-methylphenoxy)silane, propyltri(4-methylphenoxy)silane, phenyltri(4-methylphenoxy)silane, 4-methylphenyltri(4-methylphenoxy)silane, and any combinations thereof.
- 10 23. The composition of claim 16, wherein said alkoxy silane is present in an amount between about 10 ppm to about 2500 ppm.
24. The composition of claim 16, wherein said alkoxy silane is present in an amount between about 100 ppm to about 1000 ppm.
- 15 25. The composition of claim 16, wherein said one or more organohydrosiloxane compounds are one or more linear compounds, one or more cyclic compounds, and any combinations thereof.
- 20 26. The composition of claim 25, wherein said one or more linear compounds have a formula according to Formula (3),



wherein R¹⁰ is C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; R¹¹ through R¹⁶ are each independently H, C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted

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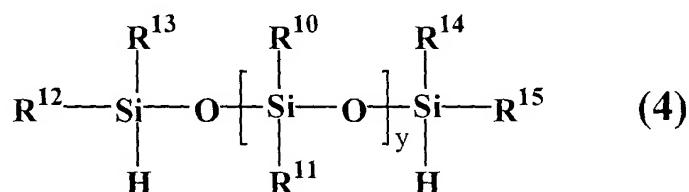
or unsubstituted aryl; x is about 1 to about 20; and x can equal 0 when at least one of R¹¹ through R¹⁶ is H.

27. The composition of claim 26, wherein R¹⁰ is methyl, ethyl, propyl,
 5 butyl, or cyclohexyl; R¹¹ through R¹⁶ is methyl, ethyl, propyl, butyl,
 cyclohexyl or H; and x is about 1 to about 10.
28. The composition of claim 26, wherein said linear
 10 organohydrosiloxanes of Formula (3) are selected from the group
 consisting of: 1,1,1,3,3-pentamethyldisiloxane, 1,1,1,3,3-
 pentaethylsiloxane, 1,1,1,3,3-pentaphenyldisiloxane, 1,1,1,3,3-
 penta(4-methylphenyl)disiloxane, 1,1,5,5-tetramethyl-3-
 ethyltrisiloxane, 1,1,5,5-tetraethyl-3-methyltrisiloxane, 1,1,3,5,5-
 pentamethyltrisiloxane, 1,1,3,5,5-pentaethyltrisiloxane, 1,1,3,5,5-
 15 pentaphenyltrisiloxane, 1,1,3,5,5-penta(4-methylphenyl)trisiloxane,
 1,1,1,5,5-heptamethyl-3-ethyltrisiloxane, 1,1,1,5,5-heptaethyl-3-
 methyltrisiloxane, 1,1,1,3,5,5-heptamethyltrisiloxane, 1,1,1,3,5,5,5-
 heptaethyltrisiloxane, 1,1,1,3,5,5,5-heptaphenyltrisiloxane,
 1,1,1,3,5,5,5-hepta(4-methylphenyl)trisiloxane, 1,1,3,5,7,7-
 20 hexamethyltetrasiloxane, 1,1,3,5,7,7-hexaethyltetrasiloxane,
 1,1,3,5,7,7-hexaphenyltetrasiloxane, 1,1,3,5,7,7-hexa(4-
 methylphenyl)tetrasiloxane, 1,1,1,3,5,7,7,7-octamethyltetrasiloxane,
 1,1,1,3,5,7,7,7-octaethyltetrasiloxane, 1,1,1,3,5,7,7,7-
 25 octaphenyltetrasiloxane, 1,1,1,3,5,7,7,7-octa(4-
 methylphenyl)tetrasiloxane, 1,1,3,5,7,9,9-heptamethylpentasiloxane,
 1,1,3,5,7,9,9-heptamethylpentasiloxane, 1,1,3,5,7,9,9-
 heptaethylpentasiloxane, 1,1,3,5,7,9,9-heptaphenylpentasiloxane,
 1,1,3,5,7,9,9-hepta(4-methylphenyl)pentasiloxane, 1,1,1,3,5,7,9,9,9-
 30 nonamethylpentasiloxane, 1,1,1,3,5,7,9,9,9-
 nonaethylpentasiloxane, 1,1,1,3,5,7,9,9,9- nona(4-
 methylphenyl)pentasiloxane, 1,1,3,5,7,9,11,11-
 octaamethylhexasiloxane, 1,1,3,5,7,9,11,11-octaethylhexasiloxane,

- 1,1,3,5,7,9,11,11-octaphenylhexasiloxane, 1,1,3,5,7,9,11,11-octa(4-methylphenyl)hexasiloxane, 1,1,1,3,5,7,9,11,11,11-decamethylhexasiloxane, 1,1,1,3,5,7,9,11,11,11-decaethylhexasiloxane, 1,1,1,3,5,7,9,11,11,11-decaphenylhexasiloxane, 1,1,1,3,5,7,9,11,11,11-deca(4-methylphenyl)hexasiloxane, and any combinations thereof.

29. The composition of claim 25, wherein said one or more linear compounds have a formula according to Formula (4),

10



- wherein R¹⁰ is C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; R¹¹ through R¹⁶ are each independently H, C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; and y is about 0 to about 20.

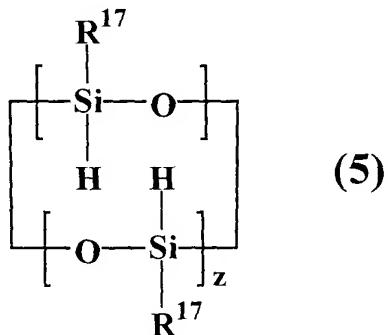
30. The composition of claim 29, wherein R¹⁰ is methyl, ethyl, propyl, butyl, or cyclohexyl; R¹¹ through R¹⁶ is methyl, ethyl, propyl, butyl, cyclohexyl or H; and y is about 0 to about 8.

31. The composition of claim 29, wherein said linear organohydrosiloxanes of Formula (4) are selected from the group consisting of: 1,1-diethyl-3,3-dimethyldisiloxane, 1,1,3,3-tetramethyldisiloxane, 1,1,3,3-tetraethyltrisiloxane, 1,1,3,3-tetraphenyldisiloxane, 1,1,3,3-tetra(4-methylphenyl)disiloxane, 1,1,5,5-tetramethyl-3,3-diethyltrisiloxane, 1,1,5,5-tetraethyl-3,3-dimethyltrisiloxane, 1,1,3,3,5,5-hexamethyltrisiloxane, 1,1,3,3,5,5-hexaethyltrisiloxane, 1,1,3,3,5,5-hexaphenyltrisiloxane, 1,1,3,3,5,5-

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hexa(4-methylphenyl)trisiloxane, 1,1,3,3,5,5,7,7-octamethyltetrasiloxane, 1,1,3,5,7,7-octaethyltetrasiloxane, 1,1,3,3,5,5,7,7-octaphenyltetrasiloxane, 1,1,3,3,5,5,7,7-octa(4-methylphenyl)tetrasiloxane, 1,1,3,3,5,5,7,7,9,9-decamethylpentasiloxane, 1,1,3,3,5,5,7,7,9,9-decaethylpentasiloxane, 1,1,3,3,5,5,7,7,9,9-decaphenylpentasiloxane, 1,1,3,3,5,5,7,7,9,9-deca(4-methylphenyl)pentasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11-dodecaamethylhexasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11-dodecaethylhexasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11-dodecaphenylhexasiloxane, and 1,1,3,3,5,5,7,7,9,9,11,11-dodeca(4-methylphenyl)hexasiloxane, and any combinations thereof.

32. The composition of claim 25, wherein said one or more cyclic compounds have a formula according to Formula (5),

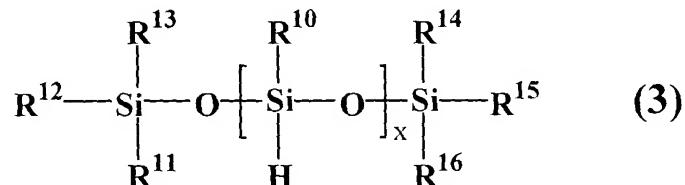


20 wherein R¹⁷ is independently C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; and z is about 2 to about 21.

33. The composition of claim 32, wherein R¹⁷ is methyl, ethyl, propyl, butyl, or cyclohexyl; and z is about 2 to about 11.

34. The composition of claim 32, wherein said cyclic organohydrosiloxanes of Formula (5) are selected from the group consisting of: 1,3,5-trimethylcyclotrisiloxane, 1,3,5-triethylcyclotrisiloxane, 1,3,5-triphenylcyclotrisiloxane, 1,3,5-tri(4-methylphenyl)cyclotrisiloxane, 1,3,5,7-tetramethylcyclotetrasiloxane, 1,3,5,7-tetraethylcyclotetrasiloxane, 1,3,5,7-tetraphenylcyclotetrasiloxane, 1,3,5,7-tetra(4-methylphenyl)cyclotetrasiloxane, 1,5-dimethyl-3,7-diethylcyclotetrasiloxane, 1,3-dimethyl-5,7-diethylcyclotetrasiloxane, 10 1,3,5,7,9-pentamethylcyclopentasiloxane, 1,3,5,7,9-pentaethylcyclopentasiloxane, 1,3,5,7,9-pentaphenylcyclopentasiloxane, 1,3,5,7,9-penta(4-methylphenyl)cyclopentasiloxane, 1,3,5,7,9,11-hexamethylcyclohexasiloxane, 1,3,5,7,9,11-hexaethylcyclohexasiloxane, 1,3,5,7,9,11-hexaphenylcyclohexasiloxane, 1,3,5,7,9,11-hexa(4-methylphenyl)cyclohexasiloxane, 1,5,9-trimethyl-3,7,11-triethylcyclohexasiloxane, 1,3,5-trimethyl-7,9,11-triethylcyclohexasiloxane, and any combinations thereof.
- 20
35. The composition of claim 16, wherein said composition comprises:

- a. one or more organohydrosiloxane compounds of Formula (3),



wherein R¹⁰ is C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl, and R¹¹ through R¹⁶ are each independently H, C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-

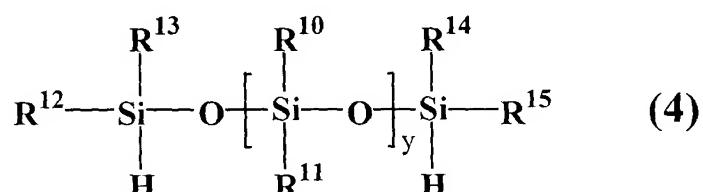
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C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; and x is about 1 to about 10;

- 5 b. an antioxidant compound of said Formula (1), wherein R¹ through R⁵ are H, OH, methyl, ethyl, methoxy, ethoxy, and tert-butyl; and
- 10 c. an alkoxy silane of said Formula (2), wherein R⁶ is methyl, ethyl, or propyl; and R⁷, R⁸ and R⁹ are methyl, ethyl, propyl, methoxy, ethoxy or propoxy.

36. The composition of claim 16, wherein said composition comprises:

- 15 a. one or more organohydrosiloxane compounds of Formula (4),



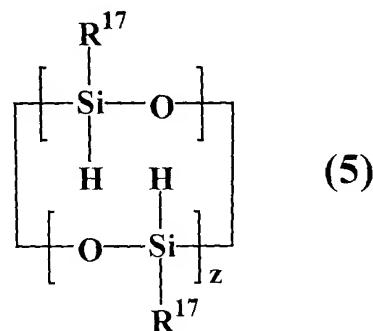
wherein R¹⁰ is C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl, and R¹¹ through R¹⁶ are each independently H, C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; and y is about 0 to about 20;

- 25 b. an antioxidant compound of said Formula (1), wherein R¹ through R⁵ are H, OH, methyl, ethyl, methoxy, ethoxy, and tert-butyl; and

- c. an alkoxy silane of said Formula (2), wherein R⁶ is methyl, ethyl, or propyl; and R⁷, R⁸ and R⁹ are methyl, ethyl, propyl, methoxy, ethoxy or propoxy.

5 37. The composition of claim 16, wherein said composition comprises:

- a. one or more organohydrosiloxane compounds of Formula (5),



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wherein R¹⁷ is independently C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; and z is about 2 to about 11;

15 b. an antioxidant compound of said Formula (1), wherein R¹ through R⁵ are H, OH, methyl, ethyl, methoxy, ethoxy, and tert-butyl; and

20 c. an alkoxy silane of said Formula (2), wherein R⁶ is methyl, ethyl, or propyl; and R⁷, R⁸ and R⁹ are methyl, ethyl, propyl, methoxy, ethoxy or propoxy.

38. A process for forming an oxide layer on a substrate comprising the steps of:

25

- a. introducing an organohydrosiloxane composition into a gas stream, thereby forming a process vapor;

- b. contacting a surface of said substrate with said process vapor; and
- c. decomposing said process vapor, thereby forming said oxide layer on said substrate,

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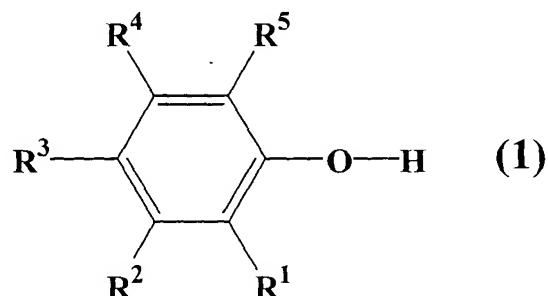
wherein the organohydrosiloxane composition comprises:

one or more organohydrosiloxane compounds, each having at least one [-HSiR-O-] unit, wherein R = C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; and

10

an antioxidant compound of Formula (1),

15



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wherein the antioxidant compound is a phenolic compound and is present in an amount between about 1 ppm to about 5000 ppm, and wherein R¹ through R⁵ are each independently H, OH, C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy or substituted or unsubstituted aryl.

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39. The process of claim 38, wherein said substrate is a semiconductor substrate.

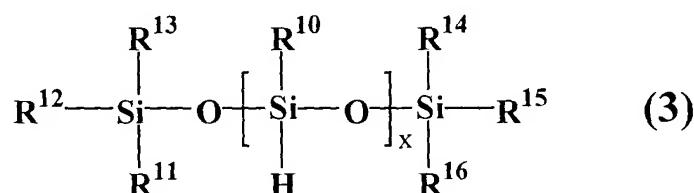
40. The process of claim 38, wherein said oxide layer is a doped silicon oxide layer comprising a dopant selected from the group consisting of: hydrogen, carbon, nitrogen, and any combinations thereof.
- 5 41. The process of claim 38, wherein said oxide layer is a doped silicon oxide layer comprising a dopant selected from the group consisting of: arsenic, boron, phosphorous, and any combinations thereof.
- 10 42. The process of claim 38, wherein said gas stream comprises gas selected from the group consisting of: nitrogen, helium, argon, oxygen, ozone, ammonia, nitrous oxide, carbon dioxide, carbon monoxide, SiH₄, silane, silicon tetrafluoride, hydrazine, and any combinations thereof.
- 15 43. The process of claim 38, wherein said process vapor further comprises a chemical precursor selected from the group consisting of: amines, aminoalcohols, silanes, siloxanes, alkanes, alkenes, alkynes, alcohols, esters, ketones, aldehydes, carboxylic acids, and any combinations thereof.
- 20 44. The process of claim 38, wherein said process vapor further comprises a chemical precursor selected from the group consisting of: arsines, alkylarsenates, phosphines, alkylphosphates, alkylphosphites, boranes, alkylborates, and any combinations thereof.
- 25 45. The process of claim 38, wherein said decomposing step comprises a decomposing means selected from the group consisting of: plasma, heating, chemical reaction, and any combinations thereof.
- 30 46. The process of claim 45, wherein said heating means comprises a temperature between about 100°C and about 800°C.

47. The process of claim 38, wherein said one or more organohydrosiloxane compounds are one or more linear compounds, one or more cyclic compounds, and any combinations thereof.

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48. The process of claim 47, wherein said one or more linear compounds have a formula according to Formula (3),

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wherein R¹⁰ is C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; R¹¹ through R¹⁶ are each independently H, C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; x is about 1 to about 20; and x can equal 0 when at least one of R¹¹ through R¹⁶ is H.

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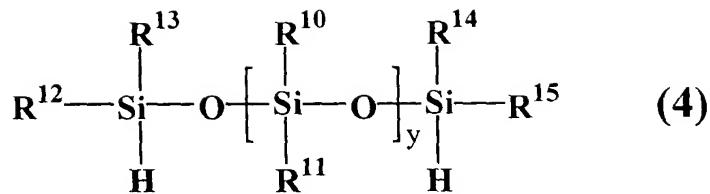
49. The process of claim 48, wherein R¹⁰ is methyl, ethyl, propyl, butyl, or cyclohexyl; R¹¹ through R¹⁶ is methyl, ethyl, propyl, butyl, cyclohexyl or H; and x is about 1 to about 10.

25 50. The process of claim 48, wherein said linear organohydrosiloxanes of Formula (3) are selected from the group consisting of: 1,1,1,3,3-pentamethyldisiloxane, 1,1,1,3,3-pentaethylsiloxane, 1,1,1,3,3-pentaphenylsiloxane, 1,1,1,3,3-penta(4-methylphenyl)disiloxane, 1,1,5,5-tetramethyl-3-ethyltrisiloxane, 1,1,5,5-tetraethyl-3-methyltrisiloxane, 1,1,3,5,5-pentamethyltrisiloxane, 1,1,3,5,5-

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pentaethyltrisiloxane, 1,1,3,5,5-pentaphenyltrisiloxane, 1,1,3,5,5-penta(4-methylphenyl)trisiloxane, 1,1,1,5,5,5-heptamethyl-3-ethyltrisiloxane, 1,1,1,5,5,5-heptaethyl-3-methyltrisiloxane, 1,1,1,3,5,5,5-heptamethyltrisiloxane, 1,1,1,3,5,5,5-heptaethyltrisiloxane, 1,1,1,3,5,5,5-heptaphenyltrisiloxane, 1,1,1,3,5,5,5-hepta(4-methylphenyl)trisiloxane, 1,1,3,5,7,7-hexamethyltetrasiloxane, 1,1,3,5,7,7-hexaethyltetrasiloxane, 1,1,3,5,7,7-hexaphenyltetrasiloxane, 1,1,3,5,7,7-hexa(4-methylphenyl)tetrasiloxane, 1,1,1,3,5,7,7,7-octamethyltetrasiloxane, 1,1,1,3,5,7,7,7-octaethyltetrasiloxane, 1,1,1,3,5,7,7,7-octaphenyltetrasiloxane, 1,1,1,3,5,7,7,7-octa(4-methylphenyl)tetrasiloxane, 1,1,3,5,7,9,9-heptamethylpentasiloxane, 1,1,3,5,7,9,9-heptaethylpentasiloxane, 1,1,3,5,7,9,9-heptaethylpentasiloxane, 1,1,3,5,7,9,9-heptaphenylpentasiloxane, 1,1,1,3,5,7,9,9-hepta(4-methylphenyl)pentasiloxane, 1,1,1,3,5,7,9,9-nonamethylpentasiloxane, 1,1,1,3,5,7,9,9,9-nonaethylpentasiloxane, 1,1,1,3,5,7,9,9,9-nonaphenylpentasiloxane, 1,1,1,3,5,7,9,9,9-nona(4-methylphenyl)pentasiloxane, 1,1,3,5,7,9,11,11-octaamethylhexasiloxane, 1,1,3,5,7,9,11,11-octaethylhexasiloxane, 1,1,3,5,7,9,11,11-octaphenylhexasiloxane, 1,1,3,5,7,9,11,11-octa(4-methylphenyl)hexasiloxane, 1,1,1,3,5,7,9,11,11,11-decamethylhexasiloxane, 1,1,1,3,5,7,9,11,11,11-decaethylhexasiloxane, 1,1,1,3,5,7,9,11,11,11-decaphenylhexasiloxane, 1,1,1,3,5,7,9,11,11,11-deca(4-methylphenyl)hexasiloxane, and any combinations thereof.

51. The process of claim 47, wherein said one or more linear compounds have a formula according to Formula (4),



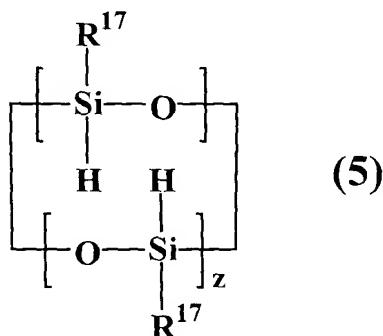
wherein R^{10} is $\text{C}_1\text{-C}_{18}$ linear, branched, or cyclic alkyl, $\text{C}_1\text{-C}_{18}$ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; R^{11}

5 through R^{16} are each independently H, $\text{C}_1\text{-C}_{18}$ linear, branched, or cyclic alkyl, $\text{C}_1\text{-C}_{18}$ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; and y is about 0 to about 20.

52. The process of claim 51, wherein R^{10} is methyl, ethyl, propyl, butyl,
10 or cyclohexyl; R^{11} through R^{16} is methyl, ethyl, propyl, butyl,
cyclohexyl or H; and y is about 0 to about 8.
53. The process of claim 51, wherein said linear organohydrosiloxanes
15 of Formula (4) are selected from the group consisting of: 1,1-diethyl-
3,3-dimethyldisiloxane, 1,1,3,3-tetramethyldisiloxane, 1,1,3,3-
tetraethyltrisiloxane, 1,1,3,3-tetraphenyldisiloxane, 1,1,3,3-tetra(4-
methylphenyl)disiloxane, 1,1,5,5-tetramethyl-3,3-diethyltrisiloxane,
1,1,5,5-tetraethyl-3,3-dimethyltrisiloxane, 1,1,3,3,5,5-
hexamethyltrisiloxane, 1,1,3,3,5,5-hexaethyltrisiloxane, 1,1,3,3,5,5-
hexaphenyltrisiloxane, 1,1,3,3,5,5-hexa(4-methylphenyl)trisiloxane,
1,1,3,3,5,5,7,7-octamethyltetrasiloxane, 1,1,3,5,7,7-
octaethyltetrasiloxane, 1,1,3,3,5,5,7,7-octaphenyltetrasiloxane,
1,1,3,3,5,5,7,7-octa(4-methylphenyl)tetrasiloxane,
1,1,3,3,5,5,7,7,9,9-decamethylpentasiloxane, 1,1,3,3,5,5,7,7,9,9-
25 decaethylpentasiloxane, 1,1,3,3,5,5,7,7,9,9-
decaphenylpentasiloxane, 1,1,3,3,5,5,7,7,9,9-deca(4-
methylphenyl)pentasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11-
dodecaamethylhexasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11-
dodecaethylhexasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11-

dodecaphenylhexasiloxane, and 1,1,3,3,5,5,7,7,9,9,11,11-dodeca(4-methylphenyl)hexasiloxane, and any combinations thereof.

54. The process of claim 47, wherein said one or more cyclic
5 compounds have a formula according to Formula (5),



10 wherein R¹⁷ is independently C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; and z is about 2 to about 21.

55. The process of claim 54, wherein R¹⁷ is methyl, ethyl, propyl, butyl,
15 or cyclohexyl; and z is about 2 to about 11.

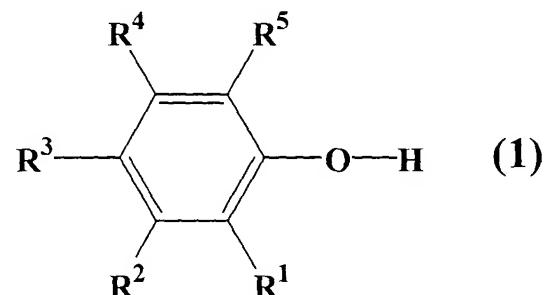
56. The process of claim 54, wherein said cyclic organohydrosiloxanes
of Formula (5) are selected from the group consisting of: 1,3,5-trimethylcyclotrisiloxane, 1,3,5-triethylcyclotrisiloxane, 1,3,5-triphenylcyclotrisiloxane, 1,3,5-tri(4-methylphenyl)cyclotrisiloxane, 1,3,5,7-tetramethylcyclotetrasiloxane, 1,3,5,7-tetraethylcyclotetrasiloxane, 1,3,5,7-tetraphenylcyclotetrasiloxane, 1,5-dimethyl-3,7-diethylcyclotetrasiloxane, 1,3-dimethyl-5,7-diethylcyclotetrasiloxane, 1,3,5,7,9-pentamethylcyclopentasiloxane, 1,3,5,7,9-pentaethylcyclopentasiloxane, 1,3,5,7,9-pentaphenylcyclopentasiloxane, 1,3,5,7,9-penta(4-

- methylphenyl)cyclopentasiloxane, 1,3,5,7,9,11-hexamethylcyclohexasiloxane, 1,3,5,7,9,11-hexaethylcyclohexasiloxane, 1,3,5,7,9,11-hexaphenylcyclohexasiloxane, 1,3,5,7,9,11-hexa(4-methylphenyl)cyclohexasiloxane, 1,5,9-trimethyl-3,7,11-triethylcyclohexasiloxane, 1,3,5-trimethyl-7,9,11-triethylcyclohexasiloxane, and any combinations thereof.
57. The process of claim 38, wherein R¹ through R⁵ are H, OH, methyl, ethyl, methoxy, ethoxy, and tert-butyl.
58. The process of claim 38, wherein said antioxidant compound of Formula (1) is selected from the group consisting of: phenol, hydroquinone, 4-methylphenol, 3-methylphenol, 2-methylphenol, 4-ethylphenol, 4-propylphenol, 4-iso-propylphenol, 4-butylphenol, 4-sec-butylphenol, 4-iso-butylphenol, 4-tert-butylphenol, 4-methoxyphenol, 3-methoxyphenol, 2-methoxyphenol, 4-ethoxyphenol, 4-propoxyphenol, 4-butoxyphenol, 2,4-di-tert-butylphenol, 2-(1-methylbutyl)phenol, 2-(benzyloxy)phenol, 2-tert-butyl-6-methylphenol, 3,4,5-trimethoxyphenol, 3-ethoxy-4-methylphenol, 4-benzyloxyphenol, 4-benzyl-2,6-di-tert-butylphenol, 2-(2-butenyl)phenol, 2-(4-methylbenzyl)phenol, 2,6-di-tert-butyl-4-methylphenol (BHT), 1,2-dihydroxybenzene, 2,4,6-tris-benzyloxyphenol, 2,4-dicyclohexyl-5-methylphenol, 6-tert-butyl-1,2-dihydroxybenzene, and any combinations thereof.
59. The process of claim 38, wherein said antioxidant compound is present in an amount between about 1 ppm to about 1000 ppm.
- 30 60. A process for forming an oxide layer on a substrate comprising the steps of:

- a. introducing an organohydrosiloxane composition into a gas stream, thereby forming a process vapor;
- b. contacting a surface of said substrate with said process vapor; and
- 5 c. decomposing said process vapor, thereby forming said oxide layer on said substrate,

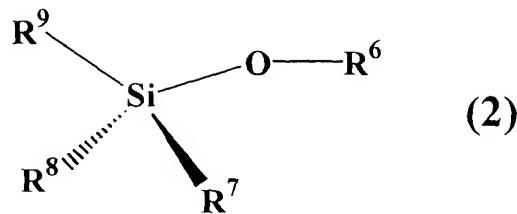
wherein the organohydrosiloxane composition comprises:

- 10 one or more organohydrosiloxane compounds, each having at least one [-HSiR-O-] unit, wherein R = C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl;
- 15 an antioxidant compound of Formula (1),



- 20 wherein the antioxidant compound is a phenolic compound and is present in an amount between about 1 ppm to about 5000 ppm, and wherein R¹ through R⁵ are each independently H, OH, C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy or substituted or unsubstituted aryl; and
- 25

an alkoxy silane of Formula (2),



wherein said alkoxy silane is present in an amount
 5 between about 1 ppm to about 5000 ppm; and wherein
 R^6 is a C₁-C₁₈ linear, branched, or cyclic alkyl or
 substituted or unsubstituted aryl; and R^7 , R^8 , and R^9
 10 are independently H, C₁-C₁₈ linear, branched, or cyclic
 alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy or
 substituted or unsubstituted aryl.

- 61. The process of claim 60, wherein said substrate is a semiconductor substrate.
- 15 62. The process of claim 60, wherein said oxide layer is a doped silicon oxide layer comprising a dopant selected from the group consisting of: hydrogen, carbon, nitrogen, and any combinations thereof.
- 20 63. The process of claim 60, wherein said oxide layer is a doped silicon oxide layer comprising a dopant selected from the group consisting of: arsenic, boron, phosphorous, and any combinations thereof.
- 25 64. The process of claim 60, wherein said gas stream comprises gas selected from the group consisting of: nitrogen, helium, argon, oxygen, ozone, ammonia, nitrous oxide, carbon dioxide, carbon monoxide, SiH₄, silane, silicon tetrafluoride, hydrazine, and any combinations thereof.
- 30 65. The process of claim 60, wherein said process vapor further comprises a chemical precursor selected from the group consisting

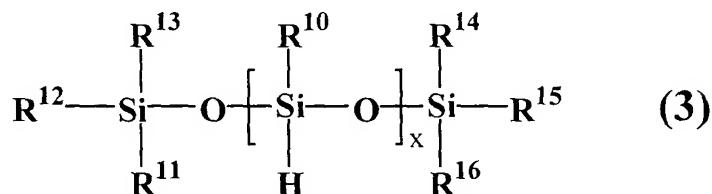
- of: amines, aminoalcohols, silanes, siloxanes, alkanes, alkenes, alkynes, alcohols, esters, ketones, aldehydes, carboxylic acids, and any combinations thereof.
- 5 66. The process of claim 60, wherein said process vapor further comprises a chemical precursor selected from the group consisting of: arsines, alkylarsenates, phosphines, alkylphosphates, alkylphosphites, boranes, alkylborates, and any combinations thereof.
- 10 67. The process of claim 60, wherein said decomposing step comprises a decomposing means selected from the group consisting of: plasma, heating, chemical reaction, and any combinations thereof.
- 15 68. The process of claim 67, wherein said heating means comprises a temperature between about 100°C and about 800°C.
69. The process of claim 60, wherein R¹ through R⁵ are H, OH, methyl, ethyl, methoxy, ethoxy, and tert-butyl.
- 20 70. The process of claim 60, wherein said antioxidant compound of Formula (1) is selected from the group consisting of: phenol, hydroquinone, 4-methylphenol, 3-methylphenol, 2-methylphenol, 4-ethylphenol, 4-propylphenol, 4-iso-propylphenol, 4-butylphenol, 4-sec-butylphenol, 4-iso-butylphenol, 4-tert-butylphenol, 4-methoxyphenol, 3-methoxyphenol, 2-methoxyphenol, 4-ethoxyphenol, 4-propoxyphenol, 4-butoxyphenol, 2,4-di-tert-butylphenol, 2-(1-methylbutyl)phenol, 2-(benzyloxy)phenol, 2-tert-butyl-6-methylphenol, 3,4,5-trimethoxyphenol, 3-ethoxy-4-methylphenol, 4-benzyloxyphenol, 4-benzyl-2,6-di-tert-butylphenol, 2-(2-butenyl)phenol, 2-(4-methylbenzyl)phenol, 2,6-di-tert-butyl-4-methylphenol (BHT), 1,2-dihydroxybenzene, 2,4,6-tris-

- benzyloxyphenol, 2,4-dicyclohexyl-5-methylphenol, 6-tert-butyl-1,2-dihydroxybenzene, and any combinations thereof.
71. The process of claim 60, wherein said antioxidant compound is
5 present in an amount between about 1 ppm to about 1000 ppm.
72. The process of claim 60, wherein R⁶ is methyl, ethyl, or propyl; and R⁷, R⁸ and R⁹ are methyl, ethyl, propyl, methoxy, ethoxy or propoxy.
- 10 73. The process of claim 60, wherein said alkoxy silane of Formula (2) is selected from the group consisting of: trimethylmethoxysilane, triethylmethoxysilane, tripropylmethoxysilane, triphenylmethoxysilane, tri(4-methylphenyl)methoxysilane, dimethyldimethoxysilane, diethyldimethoxysilane, dipropyldimethoxysilane, diphenyldimethoxysilane, di(4-methylphenyl)dimethoxysilane, methyltrimethoxysilane, ethyltrimethoxysilane, propyltrimethoxysilane, phenyltrimethoxysilane, 4-methylphenyltrimethoxysilane, trimethylethoxysilane, triethylethoxysilane, tripropylethoxysilane, triphenylethoxysilane, tri(4-methylphenyl)ethoxysilane, dimethyldiethoxysilane, diethyldiethoxysilane, dipropyldiethoxysilane, diphenyldiethoxysilane, di(4-methylphenyl)diethoxysilane, methyltriethoxysilane, ethyltriethoxysilane, propyltriethoxysilane, phenyltriethoxysilane, 4-methylphenyltriethoxysilane, trimethylpropoxysilane, triethylpropoxysilane, tripropylpropoxysilane, triphenylpropoxysilane, tri(4-methylphenyl)propoxysilane, dimethyldipropoxysilane, diethyldipropoxysilane, dipropyldipropoxysilane, diphenyldipropoxysilane, di(4-methylphenyl)dipropoxysilane, methyltripropoxysilane, ethyltripropoxysilane, propyltripropoxysilane, phenyltripropoxysilane, 4-methylphenyltripropoxysilane, trimethylbutoxysilane, triethylbutoxysilane, tripropylbutoxysilane, triphenylbutoxysilane, tri(4-methylphenyl)butoxysilane,

- dimethyldibutoxysilane, diethyldibutoxysilane,
dipropyldibutoxysilane, diphenyldibutoxysilane, di(4-methylphenyl)dibutoxysilane, methyltributoxysilane,
ethyltributoxysilane, propyltributoxysilane, phenyltributoxysilane, 4-methylphenyltributoxysilane, trimethylphenoxy silane,
triethylphenoxy silane, tripropylphenoxy silane, triphenylphenoxy silane, tri(4-methylphenyl)phenoxy silane,
dimethyldiphenoxysilane, diethyldiphenoxysilane, dipropyldiphenoxysilane, diphenyldiphenoxysilane, di(4-methylphenyl)diphenoxysilane, methyltriphenoxysilane,
ethyltriphenoxysilane, propyltriphenoxysilane, phenyltriphenoxysilane, 4-methylphenyltriphenoxysilane, trimethyl(4-methylphenoxy)silane, triethyl(4-methylphenoxy)silane, tripropyl(4-methylphenoxy)silane, triphenyl(4-methylphenoxy)silane, tri(4-methylphenyl)(4-methylphenoxy)silane, dimethyldi(4-methylphenoxy)silane, diethyldi(4-methylphenoxy)silane, dipropyldi(4-methylphenoxy)silane, diphenyldi(4-methylphenoxy)silane, di(4-methylphenyl)di(4-methylphenoxy)silane, methyltri(4-methylphenoxy)silane, ethyltri(4-methylphenoxy)silane, propyltri(4-methylphenoxy)silane, phenyltri(4-methylphenoxy)silane, 4-methylphenyltri(4-methylphenoxy)silane, and any combinations thereof.
74. The process of claim 60, wherein said alkoxy silane is present in an amount between about 10 ppm to about 2500 ppm.
75. The process of claim 60, wherein said alkoxy silane is present in an amount between about 100 ppm to about 1000 ppm.
76. The process of claim 60, wherein said one or more organohydrosiloxane compounds are one or more linear compounds, one or more cyclic compounds, and any combinations thereof.

77. The process of claim 76, wherein said one or more linear compounds have a formula according to Formula (3),

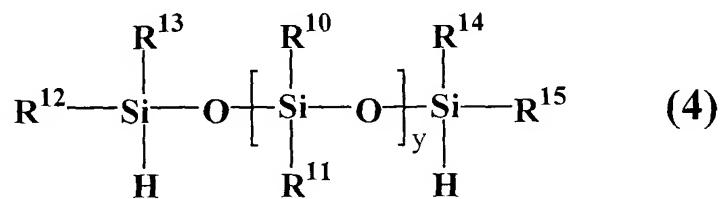
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10 wherein R^{10} is $\text{C}_1\text{-C}_{18}$ linear, branched, or cyclic alkyl, $\text{C}_1\text{-C}_{18}$ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; R^{11} through R^{16} are each independently H, $\text{C}_1\text{-C}_{18}$ linear, branched, or cyclic alkyl, $\text{C}_1\text{-C}_{18}$ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; x is 1 to about 20; and x can equal 0 when at least one of R^{11} through R^{16} is H.

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- 20
- 25
- 30
78. The process of claim 77, wherein R^{10} is methyl, ethyl, propyl, butyl, or cyclohexyl; R^{11} through R^{16} is methyl, ethyl, propyl, butyl, cyclohexyl or H; and x is about 1 to about 10.
79. The process of claim 77, wherein said linear organohydrosiloxanes of Formula (3) are selected from the group consisting of: 1,1,1,3,3-pentamethyldisiloxane, 1,1,1,3,3-pentaethylsiloxane, 1,1,1,3,3-pentaphenylsiloxane, 1,1,1,3,3-penta(4-methylphenyl)disiloxane, 1,1,5,5-tetramethyl-3-ethyltrisiloxane, 1,1,5,5-tetraethyl-3-methyltrisiloxane, 1,1,3,5,5-pentamethyltrisiloxane, 1,1,3,5,5-pentaethyltrisiloxane, 1,1,3,5,5-pentaphenyltrisiloxane, 1,1,3,5,5-penta(4-methylphenyl)trisiloxane, 1,1,1,5,5-heptamethyl-3-ethyltrisiloxane, 1,1,1,5,5-heptaethyl-3-methyltrisiloxane, 1,1,1,3,5,5-heptamethyltrisiloxane, 1,1,1,3,5,5-

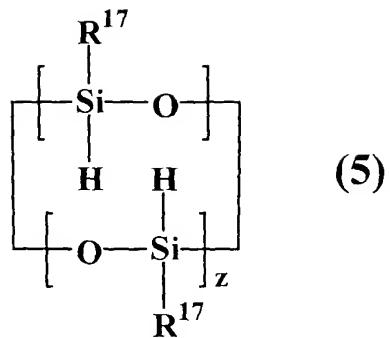
- heptaethyltrisiloxane, 1,1,1,3,5,5,5-heptaphenyltrisiloxane,
 1,1,1,3,5,5,5-hepta(4-methylphenyl)trisiloxane, 1,1,3,5,7,7-
 hexamethyltetrasiloxane, 1,1,3,5,7,7-hexaethyltetrasiloxane,
 1,1,3,5,7,7-hexaphenyltetrasiloxane, 1,1,3,5,7,7-hexa(4-
 5 methylphenyl)tetrasiloxane, 1,1,1,3,5,7,7,7-octamethyltetrasiloxane,
 1,1,1,3,5,7,7,7-octaethyltetrasiloxane, 1,1,1,3,5,7,7,7-
 octaphenyltetrasiloxane, 1,1,1,3,5,7,7,7-octa(4-
 methylphenyl)tetrasiloxane, 1,1,3,5,7,9,9-heptamethylpentasiloxane,
 1,1,3,5,7,9,9-heptamethylpentasiloxane, 1,1,3,5,7,9,9-
 10 heptaethylpentasiloxane, 1,1,3,5,7,9,9-heptaphenylpentasiloxane,
 1,1,3,5,7,9,9-hepta(4-methylphenyl)pentasiloxane, 1,1,1,3,5,7,9,9,9-
 nonamethylpentasiloxane, 1,1,1,3,5,7,9,9,9-
 nonaethylpentasiloxane, 1,1,1,3,5,7,9,9,9-
 nonaphenylpentasiloxane, 1,1,1,3,5,7,9,9,9- nona(4-
 15 methylphenyl)pentasiloxane, 1,1,3,5,7,9,11,11-
 octaamethylhexasiloxane, 1,1,3,5,7,9,11,11-octaethylhexasiloxane,
 1,1,3,5,7,9,11,11-octaphenylhexasiloxane, 1,1,3,5,7,9,11,11-octa(4-
 methylphenyl)hexasiloxane, 1,1,1,3,5,7,9,11,11,11-
 decamethylhexasiloxane, 1,1,1,3,5,7,9,11,11,11-
 20 decaethylhexasiloxane, 1,1,1,3,5,7,9,11,11,11-
 decaphenylhexasiloxane, 1,1,1,3,5,7,9,11,11,11-deca(4-
 methylphenyl)hexasiloxane, and any combinations thereof.
80. The process of claim 76, wherein said one or more linear
 25 compounds have a formula according to Formula (4),



wherein R¹⁰ is C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear,
 30 branched, or cyclic alkoxy, or substituted or unsubstituted aryl; R¹¹

through R¹⁶ are each independently H, C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; and y is about 0 to about 20.

- 5 81. The process of claim 80, wherein R¹⁰ is methyl, ethyl, propyl, butyl, or cyclohexyl; R¹¹ through R¹⁶ is methyl, ethyl, propyl, butyl, cyclohexyl or H; and y is about 0 to about 8.
- 10 82. The process of claim 80, wherein said linear organohydrosiloxanes of Formula (4) are selected from the group consisting of: 1,1-diethyl-3,3-dimethyldisiloxane, 1,1,3,3-tetramethyldisiloxane, 1,1,3,3-tetraethyltrisiloxane, 1,1,3,3-tetraphenyldisiloxane, 1,1,3,3-tetra(4-methylphenyl)disiloxane, 1,1,5,5-tetramethyl-3,3-diethyltrisiloxane, 1,1,5,5-tetraethyl-3,3-dimethyltrisiloxane, 1,1,3,3,5,5-hexamethyltrisiloxane, 1,1,3,3,5,5-hexaethyltrisiloxane, 1,1,3,3,5,5-hexaphenyltrisiloxane, 1,1,3,3,5,5-hexa(4-methylphenyl)trisiloxane, 1,1,3,3,5,5,7,7-octamethyltetrasiloxane, 1,1,3,5,7,7-octaethyltetrasiloxane, 1,1,3,3,5,5,7,7-octaphenyltetrasiloxane, 1,1,3,3,5,5,7,7-octa(4-methylphenyl)tetrasiloxane, 1,1,3,3,5,5,7,7,9,9-decamethylpentasiloxane, 1,1,3,3,5,5,7,7,9,9-decaethylpentasiloxane, 1,1,3,3,5,5,7,7,9,9-decaphenylpentasiloxane, 1,1,3,3,5,5,7,7,9,9-deca(4-methylphenyl)pentasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11-dodecaamethylhexasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11-dodecaethylhexasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11-dodecaphenylhexasiloxane, and 1,1,3,3,5,5,7,7,9,9,11,11-dodeca(4-methylphenyl)hexasiloxane, and any combinations thereof.
- 20 83. The process of claim 76, wherein said one or more cyclic compounds have a formula according to Formula (5),



wherein R¹⁷ is independently C₁-C₁₈ linear, branched, or cyclic alkyl,

5 C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or
unsubstituted aryl; and z is about 2 to about 21.

84. The process of claim 83, wherein R¹⁷ is methyl, ethyl, propyl, butyl,
or cyclohexyl; and z is about 2 to about 11.

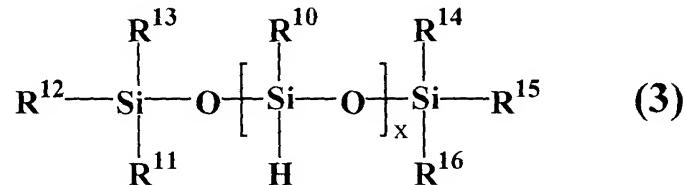
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85. The process of claim 83, wherein said cyclic organohydrosiloxanes
of Formula (5) are selected from the group consisting of: 1,3,5-
trimethylcyclotrisiloxane, 1,3,5-triethylcyclotrisiloxane, 1,3,5-
triphenylcyclotrisiloxane, 1,3,5-tri(4-methylphenyl)cyclotrisiloxane,
15 1,3,5,7-tetramethylcyclotetrasiloxane, 1,3,5,7-
tetraethylcyclotetrasiloxane, 1,3,5,7-tetraphenylcyclotetrasiloxane,
1,3,5,7-tetra(4-methylphenyl)cyclotetrasiloxane, 1,5-dimethyl-3,7-
diethylcyclotetrasiloxane, 1,3-dimethyl-5,7-diethylcyclotetrasiloxane,
1,3,5,7,9-pentamethylcyclopentasiloxane, 1,3,5,7,9-
20 pentaethylcyclopentasiloxane, 1,3,5,7,9-
pentaphenylcyclopentasiloxane, 1,3,5,7,9-penta(4-
methylphenyl)cyclopentasiloxane, 1,3,5,7,9,11-
hexamethylcyclohexasiloxane, 1,3,5,7,9,11-
hexaethylcyclohexasiloxane, 1,3,5,7,9,11-
hexaphenylcyclohexasiloxane, 1,3,5,7,9,11-hexa(4-
25 methylphenyl)cyclohexasiloxane, 1,5,9-trimethyl-3,7,11-

triethylcyclohexasiloxane, 1,3,5-trimethyl-7,9,11-triethylcyclohexasiloxane, and any combinations thereof.

86. The process of claim 60, wherein said organohydrosiloxane
5 composition comprises:

- a. one or more organohydrosiloxane compounds of Formula (3),



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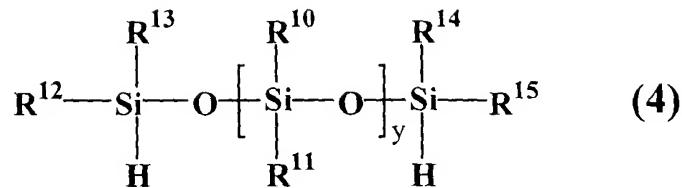
wherein R^{10} is $\text{C}_1\text{-}\text{C}_{18}$ linear, branched, or cyclic alkyl, $\text{C}_1\text{-}\text{C}_{18}$ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl, and R^{11} through R^{16} are each independently H, $\text{C}_1\text{-}\text{C}_{18}$ linear, branched, or cyclic alkyl, $\text{C}_1\text{-}\text{C}_{18}$ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; and x is about 1 to about 10;

- b. an antioxidant compound of said Formula (1), wherein R^1 through R^5 are H, OH, methyl, ethyl, methoxy, ethoxy, and tert-butyl; and
- c. an alkoxy silane of said Formula (2), wherein R^6 is methyl, ethyl, or propyl; and R^7 , R^8 and R^9 are methyl, ethyl, propyl, methoxy, ethoxy or propoxy.

87. The composition of claim 60, wherein said organohydrosiloxane composition comprises:

one or more organohydrosiloxane compounds of Formula (4),

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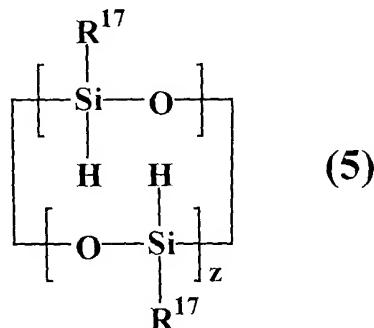
wherein R¹⁰ is C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl, and
 5 R¹¹ through R¹⁶ are each independently H, C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; and y is about 0 to about 20;

10 an antioxidant compound of said Formula (1), wherein R¹ through R⁵ are H, OH, methyl, ethyl, methoxy, ethoxy, and tert-butyl; and

an alkoxy silane of said Formula (2), wherein R⁶ is methyl, ethyl, or propyl; and R⁷, R⁸ and R⁹ are methyl, ethyl, propyl, methoxy, ethoxy or propoxy.

- 15 88. The composition of claim 60, wherein said organohydrosiloxane composition comprises:

one or more organohydrosiloxane compounds of Formula (5),
 20



- wherein R¹⁷ is independently C₁-C₁₈ linear, branched, or cyclic alkyl, C₁-C₁₈ linear, branched, or cyclic alkoxy, or substituted or unsubstituted aryl; and z is about 2 to about 11;
- 5 an antioxidant compound of said Formula (1), wherein R¹ through R⁵ are H, OH, methyl, ethyl, methoxy, ethoxy, and tert-butyl; and
- 10 an alkoxy silane of said Formula (2), wherein R⁶ is methyl, ethyl, or propyl; and R⁷, R⁸ and R⁹ are methyl, ethyl, propyl, methoxy, ethoxy or propoxy.